

Teach21 Project Based Learning
West Virginia Online Stock Market Simulation 2015-2016
DRAFT FBLA-PBL Game
View

Title	The West Virginia Online Stock Market Simulation		
Creator:	Justice, Terry tjustice@access.k12.wv.us		
Source:	2009-2010 Secondary PBL Project Updated to NxG by WV Auditor's Office in 2014		
Project Idea:	Students will learn how to invest in the stock market, how to select stocks, and the reasons why they may want to invest in stocks by playing the West Virginia on-line stock market simulation.		
Entry Event:	Class discussion on what type of products/services students and their parents use and the names of the stores where they shop. Discussion should lead into companies that are held by stock holders vs. smaller companies that are not public and are not held by stockholders. Use the first three questions of the Stock Market Guiding and Discussion Questions . Create a T-Chart on the board and ask students to complete one side with companies they think are on the stock exchange and those that may not be on the stock exchange. Discuss the differences. Assign students to check online to determine if students have chosen correctly. Use the projector to display their findings for the class to see.		
Content Standards & Objectives:	Objectives Directly Taught or Learned Through Discovery	Identified Learning Target	Evidence of Success in Achieving Identified Learning Target
	SS.12.E.12 Assess and develop financial habits that promote economic security, stability, and growth: *investments (e.g., stocks, mutual funds, certificates of deposits, and commodity trading) and *insurance (e.g., life insurance, health insurance, automobile insurance, home and renter's	Differentiate between long and short term financial goals. Formulate a plan of action of when and where to invest. Know how to construct a chart	Line graph comparing rates of returns comparing Stock Market Investments versus a savings account http://www.efficientfrontier.com/t4poi/Ch1.htm Journal entry summarizing information from line graph. Students will create and maintain a Stock Portfolio as they play an online stock market game. http://www.marketwatch.com/game/wv-fbla-pbl-2015-2016 Overview: WV FBLA-PBL League Start Date: 8/10/2015 End Date: 3/31/2016 Join After Started: Enabled Tagline: WV FBLA-PBL will add a new competition for the spring conference. For more information: email justin.southern@wvsao.gov . All Symbols can be traded.

	insurance and retirement plans).		<div>Privacy Options<ul style="list-style-type: none">○ This is a Private game.○ Password: wvfblapbl○ Player portfolios are public.</div> <div>Portfolio Options<table><tr><td>Starting balance for players:</td><td>\$100000.00</td></tr><tr><td>Commission level:</td><td>\$10.00</td></tr><tr><td>Credit interest rate:</td><td>3.00%</td></tr><tr><td>Debt interest rate for leverage:</td><td>6.00%</td></tr><tr><td>Minimum stock price:</td><td>\$0.01</td></tr><tr><td>Maximum stock price:</td><td>\$500000.00</td></tr><tr><td>Trade volume limitation:</td><td>1.00%</td></tr><tr><td>Short Selling</td><td>Enabled</td></tr><tr><td>Margin Selling:</td><td>Enabled</td></tr><tr><td>Limit Orders:</td><td>Enabled</td></tr><tr><td>Stop Loss:</td><td>Enabled</td></tr><tr><td>Partial Shares</td><td>Enabled</td></tr></table></div>	Starting balance for players:	\$100000.00	Commission level:	\$10.00	Credit interest rate:	3.00%	Debt interest rate for leverage:	6.00%	Minimum stock price:	\$0.01	Maximum stock price:	\$500000.00	Trade volume limitation:	1.00%	Short Selling	Enabled	Margin Selling:	Enabled	Limit Orders:	Enabled	Stop Loss:	Enabled	Partial Shares	Enabled
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	SS.11-12.L.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.	Evaluate personal investing goals and match them with identified companies Determine data needed to buy a stock. Know how to evaluate a company's fundamentals Examine the data needed to make an informed decision on whether to buy the stock of a company. Compare the economies of the	Utilize the notes Am I Judged by the Company I Keep? and a Spreadsheet of Fundamentals in order to compare and contrast West Virginia owned companies in which to invest. Create a map of West Virginia http://www.50states.com/maps/west_virginia.htm depicting geographic regions with major industries http://www.wvcommerce.org/people/wvregions/default.aspx , unemployment rate http://www.bls.gov/eag/eag.wv.html , and home foreclosure rate http://www.realtytrac.com/trendcenter/wv-trend.html .																								

		different geographic regions of West Virginia	
21st Century Skills	Learning Skills & Technology Tools	Teaching Strategies Culminating Activity	Evidence of Success
Information and Communication Skills:	<p>21C.O.9-12.1.LS1 - Student recognizes information needed for problem solving, can efficiently browse, search and navigate online to access relevant information, evaluates information based on credibility, social, economic, political and/or ethical issues, and presents findings clearly and persuasively using a range of technology tools and media.</p> <p>21C.O.9-12.1.TT9 - Student uses advanced telecommunication tools (e.g., email, video conferencing, interactive websites, newsgroups, video phones, chats) to create collaborative projects that are relevant to real world situations and contribute to the communication process among various groups.</p>	<p>Model how to access reliable information Evaluate information for creditability</p> <p>Teacher will bring up the West Virginia On-line Stock Market Game and model how to play the simulation.</p>	<p>Students will complete a multi-media presentation and they will follow the Presentation Rubric for guidance as to what is expected during assessment.</p> <p>Students will play the West Virginia On-line Stock Market Simulation until the game ends during the spring semester.</p>
Thinking and Reasoning Skills:	<p>21C.O.9-12.2.TT2 - Student collaborates with peers, experts and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.</p>	<p>Teacher will role play proper and improper actions within a group</p> <p>Teacher will lead class discussion about how to collaborate.</p>	<p>Students will demonstrate appropriate behavior for collaborative work.</p> <p>Students will refer to the Collaboration Rubric for guidance.</p>

Personal and Workplace Skills:	<p>21C.O.9-12.3.TT2 - Student works collaboratively to acquire information from electronic resources, conducts online research, and evaluates information as to validity, appropriateness, usefulness, comprehensiveness and bias.</p> <p>21C.O.9-12.3.TT6 - Student evaluates and applies technology tools for research, information analysis, problem solving, content learning, decision making, and lifelong learning.</p>	<p>Direct instruction on collaborative online research</p> <p>A stock broker or financial analyst as a guest speaker</p>	<p>Students will refer to the Collaboration Rubric for guidance as they learn to work together. Teacher will use the rubric for assessment of their collaboration skills.</p> <p>Students will keep a Journal-Learning Log on how to utilize investment information to make informed decisions for choosing successful investments throughout their lifetimes.</p>
Performance Objectives:	<p>Know:</p> <ul style="list-style-type: none"> What a company's "stock" is. What the P/E of a company is and how to calculate it What it means to be "long" or "short" on a company How to invest in the stock market How to diversify a portfolio What the Dow Jones is. What the S&P 500 is. <p>Do:</p> <ul style="list-style-type: none"> Evaluate a company's fundamentals to decide whether its stock would be a profitable investment. Create a spreadsheet to match an investor's goals to identified companies. Make a map of West Virginia showing major industries, unemployment rate for geographic regions, and home foreclosures rate. Make a multimedia presentation defending the companies you chose to invest in. Enter the presentation in the state FBLA-PBL spring competition. Play the West Virginia Online Stock Market Simulation. 		
Driving Question:	Knowing that the decisions involved in retirement savings will be left up to me, what will I need to know about investing to prepare myself for the workplace, family life, and planning for the future?		
Assessment	Major Group Products	Research companies in which to invest	

Plan:		Create a Spreadsheet of Company Fundamentals Prepare a multimedia presentation (Presentation Rubric) Geographic map of West Virginia http://www.50states.com/maps/west_virginia.htm and include necessary information regarding financial situations in WV http://www.wvcommerce.org/people/wvregions/default.aspx , unemployment rate http://www.bls.gov/eag/eag.wv.html , and home foreclosure rate http://www.realtytrac.com/trendcenter/wv-trend.html Play the West Virginia Online Stock Market Game			
	Major Individual Projects	Journal on Comparisons of S and P 500 vs. Savings Accounts Journal – Learning Log on life-long investing Track a company and/or industry in which to invest			
Assessment and Reflection:	Rubric(s) I Will Use:	Collaboration Collaboration Rubric	X	Written Communication Presentation Rubric	X
		Critical Thinking & Problem Solving		Content Knowledge Stock Portfolio	X
		Oral Communication Presentation Rubric	X	Other Investment and Savings Line Graph Chart	X
	Other Classroom Assessments For Learning:	Quizzes/Tests Self-Evaluation		Practice Presentations	
		Peer Evaluation		Notes	
		Peer Evaluation		Checklists/Observations	
		Online Tests and Exams		Concept Maps Map of WV Financial Topics	X
	Reflections:	Survey		Focus Group	
		Discussion Discussion Rubric	X	Task Management Chart	
		Journal Writing/Learning Log Journal - Learning Log	X	Other Project Debrief	X
Map The Product:	Students will play the West Virginia Online Stock Market Simulation . They will decide whether to invest by researching and analyzing the fundamentals of companies that conduct business in West Virginia.				
	Product: West Virginia Online Stock Market Game				
	Knowledge and Skills Needed	Already Have Learned	Taught Before the Project	Taught During the Project	
	1. Analyze a company's stock		X	X	
	2. Work collaboratively to research stocks		X	X	
	3. Understand difference between savings and investing		X		
	4. Basic investing vocabulary		X	X	

	5. Multimedia Presentation Skills	X		
	6. Differentiate between long-term and short-term investment objectives		X	
Resources:	<p>School-based Individuals: Teacher Administrator(s),</p> <p>Technology: Computer Lab Printer Internet</p> <p>Websites: http://www.marketwatch.com/game/wv-fbla-pbl-2015-2016 this is the website for the online stock market simulation http://biz.yahoo.com/r/ an excellent site for research http://www.smartmoney.com/map-of-the-market/ students will love this research site. Very interactive! http://www.kiplinger.com/ more research http://www.investorprotection.org/ investor protection site http://www.wvsao.gov/SecuritiesCommission/Education/InvestorEducation.aspx West Virginia Securities Commission investor education materials http://simulator.investopedia.com/ another stock market simulation site http://www.50states.com/maps/west_virginia.htm outline map of West Virginia http://www.realtytrac.com/trendcenter/wv-trend.html map of home foreclosure rate in West Virginia counties http://www.bls.gov/eag/eag.wv.htm map of unemployment rate by county in West Virginia http://www.wvcommerce.org/people/wvregions/default.aspx a link to manufacturing in West Virginia </p> <p>Community: Stock Broker or Financial Analyst Managers of locally owned and publicly traded companies Parents</p> <p>Materials: Spreadsheet on analyzing fundamentals of a company Journal summarizing investment options Rubric on teamwork Rubric on final portfolio presentation Journal on effects on lifelong learning Rules to West Virginia Online Stock Market Simulation (print these from the online stock market game) Self-Evaluation Rubric Am I Judged by the Company I Keep? (Notes) Stock Market Game Discussion Questions </p>			
Manage the Process:	<p>Before introducing the simulation, students will explore why it's important to invest and not just save money. They will do this by comparing the rate on savings accounts to the historical rate for the S & P 500. For the West Virginia Online Stock Market Simulation, students will be divided into groups of 4 or 5 with each student having a specific responsibility to ensure success for their team. The teacher should divide the students based on academic ability. Students will research 5 to 10 local and publicly owned companies. As the game progresses, the teacher should monitor the groups and</p>			

teach/re-teach skills as needed. While the game runs for a number of months, it is not necessary to buy/sell stocks daily. Ideally, students will go to a computer lab once per week to work on their research and decide as a team what stocks to purchase.

Project Flow Chart:

Phase One

The teacher will need to make students familiar with background information on the stock market and investing. This information must include what the stock market is, how to invest in the stock market, and how to analyze a company's stock to determine whether the stock is a good investment. Students will need to learn basic investment terminology. The teacher needs to be attentive to student's abilities at this point in the process. Ensure that students of all ability levels have a basic understanding of the terms and concepts. Re-teach as needed. In addition, the students need to realize that investing money and saving money are two entirely different concepts. To accomplish this use the line graph at this site <http://www.efficientfrontier.com/t4poi/Ch1.htm> to demonstrate the rate of return on the S&P 500 versus a savings account over a long period of time. Another avenue to accomplish this is to use an investing calculator. These calculators are readily accessible online. Have students compare a \$10000 investment at 2%, 4%, 6%, 8%, and 10%. Historically, the stock market has returned on average approximately 9% since 1929. Students should realize that a saving account at a bank is presently returning less than one percent.

Have a class discussion on West Virginia's economy and the impact that local, publicly traded companies have on the local economy. Invite local managers of these companies to your class and discuss business and investment issues with the students. Have students create a map of West Virginia depicting major industries, the current unemployment rate, and home foreclosure rate. Use the links under the "websites" section of this PBL to create this map.

Phase Two

The teacher will need to review the rules and register his/her teams at <http://www.marketwatch.com/game/wv-fbla-pbl-2015-2016>. Once the registration is completed, you can access the league by entering the password: wvfbapbl. If the teacher has multiple teams, one student for each team may become the "fund manager," which will require individual registration. The fund manager will be responsible for executing trade orders for the team. Visit the website and print a list of the rules from the online stock market game <http://www.marketwatch.com/game/wv-fbla-pbl-2015-2016>. Give each team a copy and discuss. Some highlights of the game include: teams are "given" \$100,000 to invest, teams cannot buy stock that is less than \$2 per share, and the winning portfolio will be recognized at the spring conference. To garner points for your FBLA club, a presentation must be given at the spring conference according to the event's guidelines. The presentation must sum up what you learned while participating in the game and how you will take what you have learned with you.

Each team should be comprised of students with varying academic abilities. Refer to the game website for suggested roles of each team member. For the West Virginia version, it is recommended that each team member be responsible for one to two stocks and become the "Specialist" for that company's stock. Complete the entry event for this activity. Brainstorm with students the following: where they shop, where their parents shop for clothes, household items, groceries, etc..., what brands of clothes they wear, what technology they use and the companies that produce or provide the technology, the utilities that keep them warm/cool, entertained, informed. In addition, list companies that have ties to the local and state economy (where parents are employed, where the

	<p>neighbors work, what companies on the way to school, etc...). This activity will give students a starting point of the companies they may wish to invest in. Additional ideas for stock purchases can be found at the following websites: Kiplinger http://kiplinger.com/, Yahoo http://biz.yahoo.com/r/, SmartMoney http://www.smartmoney.com/map-of-the-market/.</p> <p>Invite a stock broker to visit the class and to discuss investment ideas and critique each team's portfolios.</p> <p>Phase Three</p> <p>For the West Virginia version of the simulation, students will choose five to ten stocks of companies that do business in their local economy or in our state. They will research the companies using the Spreadsheet of Fundamentals and Am I Judged by the Company I Keep? Take notes to assist them in deciding which stocks they wish to purchase. As student teams do their research, they will keep a journal of the companies that they research and their conclusions as to why they choose to buy a company's stock. Teacher should continue to use the Stock Market Guiding and Discussion Questions as the project progresses. This will assist the teacher in assessing student understanding of their financial decisions throughout the project.</p> <p>During the Project:</p> <p>Track your portfolio using the tools in the investment game. Continue research as you learn about or become interested in companies. Buy or sell companies based on your research.</p>
<p>Project Evaluation:</p>	<p>Have students keep a journal on why they chose the company they did for their game and how the stock market game influenced their need to be life-long investors. Allow students to complete the Project Debrief.</p> <p>Monitor final progress of portfolio when the game ends to compare your team's results to others from around the state. Have students present their Portfolios, discuss their investment strategies, and offer their predictions about the future of those companies in West Virginia and beyond at the FBLA-PBL Spring Conference for participation points.</p>
<p>Resource Files Uploaded</p>	<h2 style="text-align: center;">Resource Files</h2> <ul style="list-style-type: none"> • UP3494WS2.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS2.doc) • UP3494WS3.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS3.doc) • UP3494WS4.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS4.doc) • UP3494WS5.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS5.doc) • UP3494WS6.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS6.doc) • UP3494WS7.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS7.doc) • UP3494WS8.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS8.doc) • UP3494WS9.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS9.doc) • UP3494WS10.doc (http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS10.doc) • UP3494WS11.doc

(<http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS11.doc>)

- [UP3494WS12.doc](#)

(<http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS12.doc>)

- [UP3494WS13.doc](#)

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- [UP3494WS14.doc](#)

(<http://wveis.k12.wv.us/Teach21/CSO/Upload/UP3494WS14.doc>)